

REMARKS

Allowed Claims

The Applicant thanks the Examiner for the allowance of Claims 16-19 and 28-30.

Claim Rejections - 35 U.S.C. § 102 and § 103

The Examiner has rejected claims 1-3, 10-15, and 20-22 under 35 USC 102(e), as being unpatentable over Gonzalez et al. (U.S. 6,784,076). The Examiner has rejected claims 4-6 under 35 USC 103(a) as unpatentable over Gonzalez et al. (U.S. Patent No. 6,461,967) in combination with Wu et al. (U.S. Patent No. 6,461,967). The Examiner has rejected claims 7, 9, and 23-27 under 35 USC 103(a) as unpatentable over Gonzalez et al. (U.S. Patent No. 6,461,967) in combination with Kinugawa et al. (U.S. Patent No. 4,857,986). The Examiner has rejected claim 8 under 35 USC 103(a) as unpatentable over Gonzalez et al. (U.S. Patent No. 6,461,967) in combination with Kinugawa et al. (U.S. Patent No. 4,857,986) as applied to claims 7-9, 23-27 and further in combination of Wu et al. (U.S. Patent No. 6,461,967).

The Applicant respectfully traverses. The cited references, either individually or in combination, fail to teach or render obvious each of the elements of the Applicant's claimed invention. In particular, the cited references fail to teach the element of independent claim 1 of *"implanting an at least one ionized species selected from the group consisting of the noble elements, the alkaline metals of column I of the periodic table and the alkaline earth metals of column II of the periodic table into the bottom of the recess to form an amorphous etch stop region, the ionized species being electrically neutral within the substrate."* (see Applicant's specification pg. 8 ¶16. In contrast, Gonzalez teaches implanting silicon or another Group IV element, or a combination such as silicon and germanium (Col. 5 lines 12 – 14.) Wu teaches implanting dopant ions such as phosphorous, arsenic, boron, ions from Group IIIA (Al, B, Ga, In, Tl) and Group VA (Sb, As, Bi, N, P), or silicon (Col. 40 lines 15 - 21.) Kinugawa teaches implanting phosphorous or boron into the P type regions and N type regions, respectively (Col. 5 lines 7 – 45.)

As such, the Applicant respectfully submits that the cited references fail to teach or render obvious each of the elements of independent claim 1 for at least the reasons advanced above. The Applicant requests that the Examiner withdraw the rejection.

Claims 2 – 12 depend, directly or indirectly, on claim 1. Because the cited references do not anticipate claim 1, as discussed above, the cited references do not anticipate claims 2 – 12 for at least the same reasons. Applicant respectfully requests that the Examiner withdraw the rejection.

Regarding independent claims 13, 20, and 23, the Applicant respectfully submits that the cited references, either individually or in combination, do not teach or render obvious claims 13, 20, and 23 for at least the reasons discussed above with respect to claim 1. Claims 14 - 15, 21 - 22, and 24 - 27 depend upon independent claims 13, 20, and 23, respectively, and thus are also not taught or rendered obvious by the cited references. Claims 1 – 15 and 20 - 27 are currently pending. In view of the foregoing amendments and remarks, Applicant respectfully submits that the pending claims have overcome the Examiner's rejections. Applicant respectfully requests reconsideration for the application and allowance of the pending claims.


Application No. 10/750,054
Amendment filed: June 23, 2005
Reply to Office Action of March 23, 2005

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

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Date: 6/23, 2005



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